# Complete Summary

## GUIDELINE TITLE

Cyclic perimenstrual pain and discomfort: nursing management. Evidence-based clinical practice guideline.

## BIBLIOGRAPHIC SOURCE(S)

Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN). Cyclic perimenstrual pain and discomfort: nursing management. Evidence-based clinical practice guideline. Washington (DC): Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN); 2003. 48 p. [129 references]

## GUIDELINE STATUS

This is the current release of the guideline.

## ** REGULATORY ALERT **

## FDA WARNING/REGULATORY ALERT

Note from the National Guideline Clearinghouse: This guideline references drugs for which important revised regulatory information has been released.

On September 30, 2004, Vioxx (rofecoxib) was withdrawn from the U.S. and worldwide market due to safety concerns of an increased risk of cardiovascular events. See the U.S. Food and Drug Administration (FDA) Web site for more information.

Subsequently, on April 7, 2005, after concluding that the overall risk versus benefit profile is unfavorable, the FDA requested that Pfizer, Inc voluntarily withdraw Bextra (valdecoxib) from the market. The FDA also asked manufacturers of all marketed prescription nonsteroidal anti-inflammatory drugs (NSAIDs), including Celebrex (celecoxib), a COX-2 selective NSAID, to revise the labeling (package insert) for their products to include a boxed warning and a Medication Guide. Finally, FDA asked manufacturers of non-prescription (over the counter [OTC]) NSAIDs to revise their labeling to include more specific information about the potential gastrointestinal (GI) and cardiovascular (CV) risks, and information to assist consumers in the safe use of the drug. See the FDA Web site for more information.

Most recently, on June 15, 2005, the FDA requested that sponsors of all non-steroidal anti-inflammatory drugs (NSAID) make labeling changes to their products. FDA recommended proposed labeling for both the prescription and over-the-counter (OTC) NSAIDs and a medication guide for the entire class of prescription products. All sponsors of marketed prescription NSAIDs, including

Celebrex (celecoxib), a COX-2 selective NSAID, have been asked to revise the labeling (package insert) for their products to include a boxed warning, highlighting the potential for increased risk of cardiovascular (CV) events and the well described, serious, potential life-threatening gastrointestinal (GI) bleeding associated with their use. FDA regulation 21CFR 208 requires a Medication Guide to be provided with each prescription that is dispensed for products that FDA determines pose a serious and significant public health concern. See the FDA Web site for more information.

## COMPLETE SUMMARY CONTENT



## SCOPE

### DISEASE/CONDITION(S)

Cyclic perimenstrual pain and discomfort

### GUIDELINE CATEGORY

Evaluation
Screening
Treatment

### CLINICAL SPECIALTY

Family Practice
Internal Medicine
Nursing
Obstetrics and Gynecology

### INTENDED USERS

Advanced Practice Nurses
Nurses

### GUIDELINE OBJECTIVE(S)

- To assist nurses in applying evidence-based knowledge to the nursing care of women with cyclic perimenstrual pain and discomfort (CPPD)
- To provide organized scientific evidence and information for registered nurses (RNs) and advanced practice registered nurses (APRNs) in acute and ambulatory care settings that is helpful in accomplishing the following objectives:
    - Recognizing the symptom patterns and prevalence of CPPD
    - Adopting a screening assessment for CPPD as routine nursing practice
    - Conducting a targeted assessment to identify individual symptom patterns of CPPD
    - Implementing nursing strategies applicable to CPPD symptoms
    - Assisting the woman with self-care activities and referring her to other providers as appropriate
    - Identifying practice areas in which stronger evidence and further research are needed

## TARGET POPULATION

All women who menstruate and who are usually seen in primary care settings

## INTERVENTIONS AND PRACTICES CONSIDERED

### Screening/Evaluation

1. Routine screening for cyclic perimenstrual pain and discomfort (CPPD)
2. Self assessment including screening questions
3. Focused nursing assessment including focused health history
4. Identification of cyclic perimenstrual pain and discomfort pattern and symptom management
5. Focused history and physical assessment
6. Referral, as appropriate
7. Identification of relevant nursing diagnoses
8. Review of symptom patterns and establish expected outcomes
9. Re-assessment of symptoms and evaluation of outcomes

### Treatment

1. Fundamental symptom management interventions
    - Collaborative pain assessment
    - Mutual goal-setting
    - Coping enhancement
2. Self-monitoring interventions
    - Coping enhancement
    - Tracking symptoms
    - Tracking stressors, function, health status
3. Pharmacological symptom management
    - Over-the-counter (OTC) medication
    - Nonsteroidal anti-inflammatory drugs (NSAIDS)
    - Analgesic pain relief
    - Hormones
    - Nutraceuticals
    - Antidepressant medications

- Medications under investigation

4. Topical/cutaneous symptom management
    - Heat application
    - Therapeutic massage
    - Acupressure
    - Transcutaneous electrical nerve stimulation (TENS)
5. Behavioral/cognitive symptom management
    - Behavioral and cognitive relaxation
6. Lifestyle modifications
    - General dietary modification
    - Smoking cessation
    - Exercise
7. Environmental modification interventions
    - Environmental stress management
    - Time management
    - Social support
8. Other emerging therapies
    - Acupuncture
    - Chiropractic therapy
    - Chinese herbal medicine
    - Homeopathy
    - Botanical and herbal therapies
    - Referral for surgical evaluation

### MAJOR OUTCOMES CONSIDERED

- Adequate and accurate diagnosis of perimenstrual pain and discomfort
- Symptoms improvement

## METHODOLOGY

### METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Hand-searches of Published Literature (Secondary Sources)
Searches of Electronic Databases

### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

The literature reviewed and scored for development of this guideline was derived from the body of work used to create the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) Research-Based Practice Program research utilization project called Cyclic Pelvic Pain and Comfort Management (known as RBP5) project guideline. Several topic-specific electronic database and manual searches were also conducted to identify additional relevant, recently published literature needed to update the original RBP5 project guideline. MEDLINE, CINAHL, and PsychINFO databases were searched for journal articles published in English between 2000 and 2002 on the topics of menstruation, dysmenorrhea, premenstrual syndrome, cyclic pelvic pain, menstrual pain, and non-steroidal anti-inflammatory agents. Additional articles were retrieved and

scored based on knowledge of critical or seminal works deemed necessary for inclusion in the guideline.

## NUMBER OF SOURCE DOCUMENTS

Not stated

## METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

## RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

I: Evidence obtained from at least one properly designed randomized, controlled trial or meta-analyses of randomized, controlled trials

II-1: Evidence obtained from well-designed controlled trials without randomization

II-2: Evidence obtained from well-designed cohort or case-control analytic studies, preferably from more than one center or research group

II-3: Evidence from multiple time series with or without the intervention. Dramatic results in uncontrolled experiments (such as the results of the introduction of penicillin treatment in the 1940s) could also be regarded as this type of evidence.

III: Opinions of respected authorities, based on clinical experience, descriptive studies or reports of expert committees

## METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses
Systematic Review

## DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

A system and tool for scoring the literature was developed based on the method for literature analysis presented in the American Nurses Association Manual to Develop Guidelines (Marek, 1995). Using this framework, each study reviewed by the Guideline development team was evaluated according to the following eight categories:

- Problem or question studied: Clearly stated, significant, and relevant problem
- Sampling: Representative, <20% dropout, random selection
- Measurement: Tools/method appropriate, reliable, and valid
- Internal validity: Accurate conclusions about covariation
- External validity: Valid conclusions about generalizability
- Construct validity: Appropriate independent and dependent variables identified

- Statistical conclusion validity: Statistical significance supported by data ($p \leq .05$)
- Justification for conclusions: Causal conclusions justified

As the evidence-based clinical practice guideline was further developed, the quality of evidence supporting clinical practice recommendations was determined by team consensus using the U.S. Preventive Services Task Force (1996) Guide to Clinical Preventive Services quality of evidence rating scale.

## METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

## DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

The Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) template for guideline development is based on the framework delineated in the American Nurses Association (ANA) Manual to Develop Guidelines (Marek KD, American Nurses Association Committee on Nursing Practices, Standards and Guidelines. Washington [DC]: American Nurses Publishing, American Nurses Foundation, American Nurses Association, 1995). The ANA Manual to Develop Guidelines models its process on that of the Agency for Healthcare Research Quality (AHRQ), formerly the Agency for Health Care Policy and Research (AHCPR).

Development of the Cyclic Perimenstrual Pain and Discomfort: Nursing Management Evidence-Based Clinical Practice Guideline is an outgrowth of AWHONN's Research-Based Practice Program research utilization project called Cyclic Pelvic Pail and Comfort Management (known as RBP5). The process to refine the project guideline began in the spring of 2002 with a call for Association of Women's Health, Obstetric and Neonatal Nurses expert member volunteers to serve on the Evidence-Based Clinical Practice Guideline Development Team. Team members were appointed in the summer of 2002 and participated from August 2002 through May 2003 in teleconferences, literature review, evaluation, and scoring.

## RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

## COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

## METHOD OF GUIDELINE VALIDATION

Peer Review

## DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

A final draft guideline was distributed to nurse experts in the field. Each reviewer was asked to read and evaluate the guideline for accuracy and timeliness of information included and submit comments with recommendations for changes. A formal evaluation tool was not used. Reviewer comments were presented to the guideline development team for consideration or inclusion in the guideline.

## RECOMMENDATIONS

### MAJOR RECOMMENDATIONS

Quality of Evidence Ratings (I, II-1, II-2, II-3, III) are defined at the end of the "Major Recommendations" field.

Screening for Cyclic Perimenstrual Pain and Discomfort (CPPD)

1. Ideally, all women should be screened for CPPD on a routine basis.

   (Robinson & Swindle, 2000; Jamieson & Steege, 1996; Hewison & van den Akker, 1996: Evidence Rating: III)

2. Incorporate screening questions into a self-assessment that is routinely collected during intake.

   Much of the basic subjective data can be collected via a structured questionnaire. The following screening questions are effective:

   a. Do you ever have pelvic pain or cramps during or around the time of your period?
   b. Are you able to treat this pain so it doesn't bother you?
   c. Do you ever have other physical or mood discomforts during or around the time of your period?
   d. Are you able to treat these discomforts so they don't bother you?

   (Wittchen et al., 2002: Evidence Rating: II-1; Banikarim, Chacko, & Kelder, 2000: Evidence Rating: III)

Nursing Assessment of Cyclic Perimenstrual Pain and Discomfort

1. Conduct a focused nursing assessment for women with CPPD for whom current treatments or selfcare therapies are ineffective.

   (Jamieson & Steege, 1996: Evidence Rating: III) (Woods, Mitchell, & Taylor, 1999: Evidence Rating: I)

   An interview by a nurse can confirm self-report data as well as collect additional data. Start with a focused health history whenever possible (see Appendix A in the original guideline document).

   (Runtz, 2002: Evidence Rating: II-2) (Hornsby, Wilcox, & Weinberg, 1998: Evidence Rating: II-2) (Jamieson & Steege, 1996: Evidence Rating: III)

(Montero et al., 1996: Evidence Rating: II-2) (Parazzini et al., 1994: Evidence Rating: II-2) (Harlow & Park, 1996: Evidence Rating: II-3) (Jarrett, Heitkemper, & Shaver, 1995: Evidence Rating: III) (Sundell, Milsom, & Andersch, 1990: Evidence Rating: II-1)

2. Identify the individual woman's pattern of CPPD.

   The menstrual cycle may be divided into three phases: premenstrual, early menstrual (days 1-3 or days of heavy flow), and late menstrual (day 4 and onward or days of lighter flow).

   (Woods, Mitchell, & Taylor, 1999: Evidence Rating: I) (Brodie & Niven, 2000: Evidence Rating: II-2)

   The following areas should be assessed:

   a. Pattern of severity of CPP across pre- and early menstrual phases
   b. Rating of overall distress caused by CPP
   c. Pattern of severity of other cyclic discomforts across pre- and early menstrual phases
   d. Rating of overall distress caused by cyclic discomforts
   e. Influences on the cyclic pain symptoms -- e.g., work stress, diet, or exercise

   (Woods, Mitchell & Taylor, 1999; Taylor, 1999: Evidence Rating: I)

3. Identify the individual woman's pattern of symptom management by gathering the following information:
   a. Interventions, including self-care strategies
   b. Pattern of use across pre- and early menstrual phases
   c. Rating of relief obtained from intervention
   d. Rating of satisfaction with pain and symptom control
   e. Rating of adherence (i.e., consistent use of treatment)

   (Taylor, 2000: Evidence Rating: II-2) ("A model for symptom management," 1994: Evidence Rating: III) (Campbell & McGrath, 1997: Evidence Rating: II-2).

4. Conduct a focused history and physical assessment using data from the history as a basis.

   The components of a focused history and physical assessment are provided in Appendix A in the original guideline document. Assessment and diagnosis are a dynamic process. The items in the appendix are presented in a logical order but may be adapted to fit within the routines of the nurse's practice.

   (Taylor, 2000; Evidence Rating: II-2)

5. Refer the woman to or co-manage with an appropriate health care provider as needed.

(American Nurses Association, 1997: Evidence Rating: III).

6. Throughout the assessment and diagnosis processes, use of standardized nursing language to communicate about CPPD is preferred.

   (Johnson & Maas, 1998: Evidence Rating: III)

Nursing Diagnosis of Cyclic Perimenstrual Pain and Discomfort

1. Organize assessment data into symptom patterns and identify relevant nursing diagnoses as follows:
   a. Cyclic Pelvic Pain (CPP)
      - Abdominal cramps
      - Nausea, vomiting
      - Backache
      - Change in bowel frequency
   b. Perimenstrual Physical Discomforts
      - Fatigue
      - Headaches
      - Fluid retention
      - Joint aches and pain
      - Breast tenderness
      - Leg/thigh discomfort
      - Change in energy and appetite
   c. Perimenstrual Mood Discomforts
      - Depression
      - Irritability
      - Tension
      - Impatience
      - Anxiety
      - Anger
      - Mood swings
      - Hostility
      - Change in sexual desire
      - Guilt
      - Feeling out of control
      - Tearfulness

   (Taylor, 1999: Evidence Rating: I) (Woods, Mitchell, & Taylor, 1999: Evidence Rating: I) (Angst et al., 2001: Evidence Rating: II-2)

Planning Expected Outcomes and Care

1. Review assessment data together with the woman and identify the outcomes important to the woman and amenable to nursing intervention. Expected outcomes for CPPD management may include the following:
   a. Improvements in CPP symptom frequency, severity, distress and pattern
   b. Improvements in discomfort symptom frequency, severity, distress, and pattern
   c. Increased comfort level (physical and psychosocial well-being)
   d. Successful use of treatments to manage symptoms

e. Relief of pain/discomfort
f. Enhanced role performance (work, family/friends, school, leisure)
g. Patient understanding of the cost of various forms of treatment

(Thompson & Gick, 2000: Evidence Rating: II-2) (Zander, 1996: Evidence Rating: III) (Dawood, 1985: Evidence Rating: III) (Harlow & Park, 1996: Evidence Rating: II-3) (Hewison & van den Akker, 1996: Evidence Rating: III)

2. Review symptom patterns and establish expected outcomes through mutual goal-setting with the woman.

   (Banikarim, Chacko, & Kedler, 2000: Evidence Rating: III) (Taylor, 2000: Evidence Rating: II-2)

   Use the assessment as an opportunity to educate women about managing pain and discomfort.

   (Dodd et al., 2001: Evidence Rating: III) ("A model for symptom management," 1994: Evidence Rating: III) (Hegyvary, 1994: Evidence Rating: III) (Robertson, 1991: Evidence Rating: III) (Taylor, 1999: Evidence Rating: I)

3. Develop an individualized treatment plan, incorporating the following concepts:
   a. Multimodal treatment strategies
   b. Participant involvement through personal choice whenever possible

   (Bulechek & McCloskey, 1999: Evidence Rating: III) (Taylor, 1999: Evidence Rating: I)

<u>Nursing Interventions for Cyclic Perimenstrual Pain and Discomfort</u>

1. Implement one or more of the following fundamental symptom management interventions as indicated:
   a. Collaborative pain assessment
      - Focused assessment with participation by the woman

      (Taylor, 2000: Evidence Rating: II-2) (Woods, Mitchell, & Taylor, 1999: Evidence Rating: I)

   b. Mutual goal-setting
      - Identify goals of care with the woman
      - Explore with the woman ways to best achieve the goals

      (Taylor, 2000: Evidence Rating: II-2) (Woods, Mitchell, & Taylor, 1999: Evidence Rating: I)

   c. Coping enhancement
      - Provide atmosphere of acceptance
      - Provide factual information concerning diagnosis, treatment, and prognosis

(Taylor, 2000: Evidence Rating: II-2) (Woods, Mitchell & Taylor, 1999: Evidence Rating: I)

2. Consider implementation of one or more of the following self-monitoring interventions:
    a. Coping enhancement
    b. Tracking symptoms (using a calendar or chart; see Appendix B in the original guideline document)
    c. Tracking stressors, function, health status

    (Taylor, 2000: Evidence Rating: II-2) (Woods, Mitchell, & Taylor, 1999: Evidence Rating: I) (Taylor, 1999: Evidence Rating: I) (Goodale, Domar, & Benson, 1990: Evidence Rating: I) (Steiner et al., 1995: Evidence Rating: I)

3. Consider implementation of one or more of the following symptom regulation interventions:
    a. Pharmacological symptom management
        - Over-the-counter (OTC) medication
        - Timing and strength of the medication are critical to pain relief. Women should be advised to take an adequate dose of medication at the first sign of pain or before bleeding occurs.
        - Manufacturers' recommendations for Over-the-Counter medications should not be exceeded (see prescriptive levels for others) unless alternative dosing is recommended by a health professional with prescriptive authority.

        (Harlow & Park, 1996: Evidence Rating: II-3) (Dawood, 1985: Evidence Rating: III)

        - Nonsteroidal anti-inflammatory drugs (NSAIDS, e.g., ibuprofen, ketoprofen, naproxen sodium, and aspirin)
        - Women should be advised to read labels of other OTC medications taken concomitantly, particularly cold and sleep remedies.
        - Women should be advised regarding appropriate duration of use because of the potential for gastrointestinal distress or other side effects.

        (Lethaby, Augood, & Duckett, 2002: Evidence Rating: I).

        - Prescription NSAIDs such as:
            - Ibuprofen
            - Naproxen
            - Ketoprofen
            - Celecoxib
            - Rofecoxib
            - Valdecoxib

        (Daniels et al., 2002; de los Santos et al., 2001; Morrison et al., 1999: Evidence Rating: I)

- Analgesic pain relief
    - Consider acetaminophen for pain relief.

(Zhang & Li Wan Po, 1998: Evidence Rating: I)

- Hormones
    - Combination estrogen-progestin oral contraceptives
    - Progesterone intrauterine device

(Creatsas et al., 1990: Evidence Rating: I) (Iyer, Farquhar, & Jepson, 2000: Evidence Rating: I) (Dawood, 1985: Evidence Rating: III) (Milsom, Sundell, & Andersch, 1990: Evidence Rating: III) (Brown, Ling, & Wan, 2002: Evidence Rating: II-2) (Oinonen & Mazmanian, 2002: Evidence Rating: III) (Freeman et al., 2001: Evidence Rating: II-2) (Wyatt et al., 2001: Evidence Rating: I) (Wildemeersch, Schacht, & Wildemeersch, 2001: Evidence Rating: II-3).

- Nutraceuticals

    The following nutraceuticals may be considered in addition to a healthy diet and a general multivitamin and mineral supplement if the woman has no contraindications. (See also "General dietary modification" section for CPPD symptom management.)

    (Proctor & Murphy, 2002: Evidence Rating: I) (Stevinson & Ernst, 2001: Evidence Rating: I) (Oakley, 1998: Evidence Rating: III) (Willett, 2001: Evidence Rating: III)

    The doses recommended below are in addition to the amounts generally found in multivitamin and mineral supplements.

    - Calcium

        The usual recommended dose is 1,200 mg/day in divided doses and no more than 2,500 mg/day, including dietary sources.

    (Thys-Jacobs et al., 1989; Thys-Jacobs et al., 1998: Evidence Rating: I)

    - Magnesium

        The usual recommended dose is 250 mg/day; increase or decrease dose in relation to constipation symptoms or laxative effect. Do not exceed 500 mg/day.

    (DeSouza et al., 2000; Proctor & Murphy, 2002; Taylor, 1999: Evidence Rating: I)

    - Essential fatty acids

The usual recommended dose of fish oil capsules or supplements is 1,000 mg/day of eicosapentaenoic acid (EPA) and 700 mg/day of docosahexaenoic acid (DHA) in one or two divided doses for 2 months. Ideally, this regimen should also include vitamin E supplements.

(Deutch, 1995: Evidence Rating: III) (Harel et al., 1996: Evidence Rating: I)

- Vitamin B complex

  The usual recommended dose of vitamin B6 is 50-200 mg/day, not to exceed 200 mg/day.

(Abraham & Hargrove, 1980: Evidence Rating: I) (Doll et al., 1989: Evidence Rating: I) (Kleijnen, Ter Riet, & Knipschild, 1990: Evidence Rating: III)

The usual recommended dose of vitamin B1 is 100 mg/day.

(Gokhale, 1996: Evidence Rating: I)

- Antidepressant medication
  - Antidepressant medication may be considered for women with severe premenstrual syndrome (PMS) or premenstrual dysphoric disorder (PMDD).
  - Women should be referred to a mental health professional as indicated for symptoms of depression

(Dimmock, et al., 2000: Evidence Rating: I) (Steiner et al., 1995 Evidence Rating: I) (Steiner et al., 1997 Evidence Rating: I) (Steiner et al., 2001: Evidence Rating: I) (Taylor, 1999: Evidence Rating: II-2)

- Medications under investigation
  - Nimesulide
  - Transdermal nitroglyceride
  - Vasopressin antagonists
  - Note: Further research is needed to clarify appropriate clinical use of these drugs to treat CPPD

(Pirhonen & Pulkkinen, 1995; Mehlisch & Fulmer, 1997; Facchinetti et al., 2002; Marchini et al., 1995; Moya et al., 2000; "Transdermal nitroglycerine," 1997; Brouard et al., 2000; Valentin et al., 2000: Evidence Rating: I)

b. Topical/cutaneous symptom management

The following methods may be considered to help manage CPPD symptoms:

- Heat application
    - Heating pad (as needed)
    - Hot baths (as needed)
    - Disposable heat wrap (see manufacturer's instructions)

(Akin et al., 2001: Evidence Rating: I)

- Therapeutic massage
    - Head/neck
    - Full body massage
    - Foot massage

(Hernandez-Reif et al., 2000: Evidence Rating: I)

- Acupressure

(Taylor, Miaskowski, & Kohn, 2002: Evidence Rating: I)

- Transcutaneous electrical nerve stimulation (TENS)

(Dawood & Ramos, 1990: Evidence Rating: I) (Kaplan et al., 1994: Evidence Rating: II-3) (Proctor et al., 2002: Evidence Rating: I)

c. Behavioral/cognitive symptom management

The following techniques may be recommended to help manage CPPD symptoms:

- Behavioral relaxation
    - Breathing exercises
    - Stretching exercises
    - Progressive muscle relaxation
    - Autogenic training

(Goodale, Domar, & Benson, 1990: Evidence Rating: I)

- Cognitive relaxation
    - Thought-stopping strategies
    - Thought substitution
    - Decreased negative self-talk
    - Meditation
    - Mindfulness meditation
    - Guided imagery
    - Prayer
    - Affirmations
    - Biofeedback
    - Distraction

(Kirkby 1994: Evidence Rating: II-I) (Taylor, 1996: Evidence Rating: II-2) (Van Zak, 1994: Evidence Rating: I) (Taylor, 1999: Evidence Rating: I)

4. Encourage the following lifestyle modifications as indicated:
    a. General dietary modification
        - Decreasing intake of caffeine, simple sugars, and salt
        - Eating frequent, small meals
        - Increasing water and fluid intake to 6-8 glasses/day

        (Barnard et al., 2000: Evidence Rating: II-1)

        - Reducing alcohol intake
        - Increasing intake of foods that can decrease symptoms, such as those that:
            - decrease fluid retention
            - are rich in essential fatty acids
            - are rich in B complex vitamins
            - are rich in calcium and magnesium
        - Using a daily multivitamin and mineral supplement
        - Using a premenstrual syndrome-formula vitamin and mineral supplement during premenses

        (Sayegh et al., 1995: Evidence Rating: I) (Rossignol & Bonnlander, 1990: Evidence Rating: II-2) (Harlow & Park, 1996: Evidence Rating: II-3) (Hornsby, Wilcox, & Weinberg, 1998: Evidence Rating: II-2) (Parazzini et al., 1994: Evidence Rating: II-2) (Taylor, 1999: Evidence Rating: I)

    b. Smoking cessation
        - Encourage smoking cessation, particularly early in the menstrual cycle (follicular phase)

        (Allen et al., 2000: Evidence Rating: I) (Perkins et al., 2000: Evidence Rating: II-2).

    c. Exercise
        - Encourage one or more of the following types of exercise as indicated and as can be tolerated:
            - Regular aerobic exercise
            - Nonaerobic exercise (e.g., yoga, tai chi, stretching/relaxation)
            - Exercise modification across the menstrual cycle

        (Jarrett, Heitkemper, & Shaver, 1995: Evidence Rating: II-2) (Giacomoni et al., 2000: Evidence Rating: I) (Golumb, Solidum, & Warren, 1998: Evidence Rating: III) (Prior et al., 1987: Evidence Rating: II-1) (Taylor, 1999: Evidence Rating: I)

5. Consider the following environmental modification interventions:
    a. Environmental stress management

        (Taylor, 1996: Evidence Rating: II-2) (Woods, Mitchell, & Taylor, 1999: Evidence Rating: I) (Brown & Zimmer, 1986: Evidence Rating: II-2)

b. Time management

(Taylor, 1999: Evidence Rating: I)

c. Social support

(Morse, 1997: Evidence Rating: II-2) (Robertson, 1991: Evidence Rating: III) (Taylor & Bledsoe, 1985: Evidence Rating: II-3) (Taylor, 1996: Evidence Rating: II-2) (Alonso & Coe, 2001: Evidence Rating: II-3) (Taylor, 2000: Evidence Rating: II-2)

6. Consider other emerging therapies that may help manage symptoms. In most cases, further research for emerging therapies is required to conclusively determine safety and effectiveness. Nurses should inquire about these therapies when assessing patients, and when providing counseling should take into account the best available scientific evidence, risks and benefits of therapies.
   a. Acupuncture

   (Helms, 1987: Evidence Rating: I) (Proctor et al., 2002: Evidence Rating: I)

   b. Chiropractic therapy

   (Liebl & Butler, 1990: Evidence Rating: II-3) (Proctor et al., 2001: Evidence Rating: I)

   c. Chinese herbal medicine

   (Kotani et al., 1997: Evidence Rating: I)

   d. Homeopathy

   (Yakir et al., 2001: Evidence Rating: I)

   e. Botanical and herbal therapies
      - Chaste tree berry (Vitex agnus castus, also known as chasteberry) may be recommended, but is contraindicated for women who are lactating or taking oral contraceptives.

        (Schellenberg, 2001: Evidence Rating: I) (Bascom & American College of Emergency Physicians, 2002: Evidence Rating: III).

      - If omega-3 fatty acids do not sufficiently address pain and breast tenderness, consider evening primrose oil capsules (gamma linolenic acid, an omega-6 fatty acid), 2,000-3,000 mg/day, in combination with vitamin E supplements. Potential side effects of evening primrose oil, although uncommon, include gastric discomfort, nausea, and headache.

        (Taylor & Colino, 2002; Hardy, 2000: Evidence Rating: III)

f. Referral for surgical evaluation

(Chen & Soong, 1997: Evidence Rating: III) (Wilson et al., 2000: Evidence Rating: I)

Evaluation

1. Re-assess the woman's CPPD symptoms.
    - Ideally, the same assessment tools should be used for both the initial assessment and follow-up evaluation. (See Appendices A and B in the original guideline document.)

    (Zander, 1996: Evidence Rating: III)

2. Evaluate outcomes of intervention.
    - Achievement of expected outcomes initially identified by the woman in collaboration with her health care provider should be evaluated.
    - When a woman is referred to another health care provider for additional evaluation or treatment, follow up on the woman's progress whenever possible and indicated.

    (Dodd et al., 2001: Evidence Rating: III)

Definitions:

I: Evidence obtained from at least one properly designed randomized, controlled trial or meta-analyses of randomized, controlled trials

II-1: Evidence obtained from well-designed controlled trials without randomization

II-2: Evidence obtained from well-designed cohort or case-control analytic studies, preferably from more than one center or research group

II-3: Evidence from multiple time series with or without the intervention. Dramatic results in uncontrolled experiments (such as the results of the introduction of penicillin treatment in the 1940s) could also be regarded as this type of evidence.

III: Opinions of respected authorities, based on clinical experience, descriptive studies or reports of expert committees

## CLINICAL ALGORITHM(S)

None provided

## EVIDENCE SUPPORTING THE RECOMMENDATIONS

## REFERENCES SUPPORTING THE RECOMMENDATIONS

References open in a new window

### TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

Each clinical practice recommendation presented in the Guideline is supported by a referenced rationale using American Psychological Association format and includes the quality of evidence ratings for each reference. The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

## BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

### POTENTIAL BENEFITS

Nurses are in a unique position to intervene with women experiencing cyclic perimenstrual pain and discomfort (CPPD). Nurses are present in most health care settings, often as the first point of contact for women. The screening and assessment skills of nurses can help identify symptoms indicative of CPPD that might otherwise be missed. The nursing model of patient care focuses on patient-centered care, advocacy, health promotion, and self-care. Using an evidence-based approach, nurses can have a significant impact on the care of women with CPPD.

### POTENTIAL HARMS

- The most common side effect of nonsteroidal anti-inflammatory drugs is gastrointestinal distress, which can be a significant adverse event.
- High doses of pyridoxine have been found to cause neurotoxicity.
- A meta-analysis showed that selective serotonin reuptake inhibitors (SSRIs) had a high rate of side effects.
- Transdermal nitroglyceride has unwanted systemic side effects, such as severe headache.
- Chaste tree berry can cause mild side effects, such as acne, skin rash, and intermenstrual bleeding.

## CONTRAINDICATIONS

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Chaste tree berry is contraindicated for women who are lactating or taking oral contraceptives.

## QUALIFYING STATEMENTS

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The guideline was developed for the Association of Women's Health, Obstetric, and Neonatal Nurses (AWHONN) as a resource for nursing practice. The guideline does not define a standard of care, nor is it intended to dictate an exclusive course of management. It presents general methods and techniques of practice

that are currently acceptable, based on current research, and used by recognized authorities. Proper care of individual patients may depend on many individual factors as well as professional judgment. AWHONN has tried to ensure that drug classifications and selections set forth in this text are in accordance with current recommendations and practice at the time of publication. However, in view of ongoing research, changes in government regulations and the constant flow of information relating to drug therapy and drug reactions, the reader is urged to check other available evidence published in referenced resources for each drug for any change in indications and dosages and for added warnings and precautions. This is particularly important when a recommended agent is a new or infrequently employed drug. The information presented is not designed to define standards of practice for employment, licensure, discipline, legal or other purposes. Variations and innovations that are consistent with law and that demonstrably improve the quality of patient care should be encouraged.

## IMPLEMENTATION OF THE GUIDELINE

### DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

### IMPLEMENTATION TOOLS

Chart Documentation/Checklists/Forms
Patient Resources
Quick Reference Guides/Physician Guides
Resources
Staff Training/Competency Material

For information about availability, see the "Availability of Companion Documents" and "Patient Resources" fields below.

## INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

### IOM CARE NEED

Getting Better

### IOM DOMAIN

Effectiveness

## IDENTIFYING INFORMATION AND AVAILABILITY

### BIBLIOGRAPHIC SOURCE(S)

Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN). Cyclic perimenstrual pain and discomfort: nursing management. Evidence-based clinical

practice guideline. Washington (DC): Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN); 2003. 48 p. [129 references]

## ADAPTATION

Not applicable: The guideline was not adapted from another source.

## DATE RELEASED

2003

## GUIDELINE DEVELOPER(S)

Association of Women's Health, Obstetric, and Neonatal Nurses - Professional Association

## SOURCE(S) OF FUNDING

Association of Women's Health, Obstetric, and Neonatal Nurses

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Evidence-Based Clinical Practice Guideline Development Team

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## FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

## GUIDELINE STATUS

This is the current release of the guideline.

## GUIDELINE AVAILABILITY

Electronic copies: None available

Print copies: Available by contacting the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN), 2000 L Street, N.W. Suite 740, Washington, D.C. 20036; Phone: (800) 673-8499; Web site: www.awhonn.org/store.

## AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- Nursing assessment, diagnoses and interventions for CPPD. Quick care guide. Washington (DC): Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN), 2003. 2 p.

Electronic copies: Not available at this time.

Print copies: One copy is included with purchase of the guideline; not available for single purchase. Contact the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN), 2000 L Street, N.W. Suite 740, Washington, D.C. 20036; Phone: (800) 354-2268; Web site: www.awhonn.org.

The following implementation tools are available in the original guideline document:

- Focused nursing assessment. Appendix A. Cyclic perimenstrual pain and discomfort: nursing management. Evidence-based clinical practice guideline. Washington (DC): Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN); 2003.
- Continuing education credit application. Appendix C. Cyclic perimenstrual pain and discomfort: nursing management. Evidence-based clinical practice guideline. Washington (DC): Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN); 2003.
- Post test questions. Appendix D. Cyclic perimenstrual pain and discomfort: nursing management. Evidence-based clinical practice guideline. Washington (DC): Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN); 2003.
- Evaluation form. Appendix E. Cyclic perimenstrual pain and discomfort: nursing management. Evidence-based clinical practice guideline. Washington (DC): Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN); 2003.

## PATIENT RESOURCES

The following is available:

- CPPD symptom calendar. Appendix B. Cyclic perimenstrual pain and discomfort: nursing management. Evidence-based clinical practice guideline. Washington (DC): Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN); 2003.

Electronic copies: Not available at this time.

Print copies: One copy is included with purchase of the guideline; not available for single purchase. Contact the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN), 2000 L Street, N.W. Suite 740, Washington, D.C. 20036; Phone: (800) 354-2268; Web site: www.awhonn.org.

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

### NGC STATUS

This NGC summary was completed by ECRI on January 26, 2006. The information was verified by the guideline developer on March 6, 2006.

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